

LISTING OF THE CLAIMS

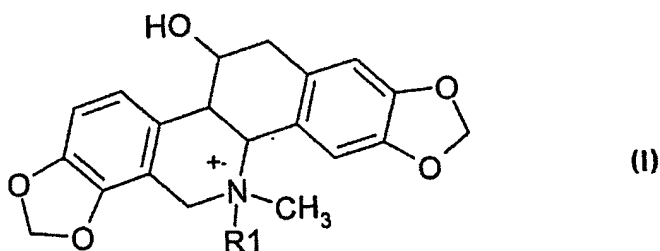
This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An alkaloid reaction product, comprising at least one alkaloid derivative obtained through reaction of one or more alkaloids with an alkylating agent, wherein in the derivative an initially tertiary nitrogen is present in quaternary form to which, as a fourth ligand, a hydrogen residue or a residue originating from the alkylating agent is bound, the residue preferably being selected from the group consisting of a methyl, ethyl, and tris (1-aziridiny) phosphine sulphide residue, or from a part of tris (1- aziridiny) phosphine sulphide.
2. (Currently Amended) The alkaloid reaction product according to claim 1, wherein at least one alkaloid derivative is present in the form of a water-soluble salt, ~~preferably in the form of a hydrochloride.~~
3. (Currently amended) The alkaloid reaction product according to claim 1 ~~or 2~~, wherein the alkaloid is at least one alkaloid present in the herb *Chelidonium majus* L., ~~preferably a mixture of several or all alkaloid of *Chelidonium majus* L.~~
4. (Currently amended) The alkaloid reaction product according to claim 1 ~~any one of claims 1 to 3~~, wherein the alkaloid is selected from the group consisting of chelidonine, protopin, stylopin, allocryptopin, homochelidonine, sanguinarine, chelamidine, chelamine, L-sparteine and oxychelidonine.
5. (Currently amended) The alkaloid reaction product according to claim 1 ~~any one of claims 1 to 4~~, wherein chelidonine, oxychelidonine, or methoxychelidonine is present as a sole alkaloid source.
6. (Currently amended) The alkaloid reaction product according to claim 1 ~~any one of claims 1 to 5~~, wherein the product further comprises at least one compound selected from the group consisting of unreacted tertiary alkaloids, unreacted alkylating agent, and decomposition products of the alkylating agent.

7. (Currently amended) The alkaloid reaction product according to claim 1 ~~any one of claims 1 to 6~~, wherein the product is further characterized by at least one analytical showing selected from the group consisting of the NMR spectrum in Fig. 4, the UV spectrum in Fig. 5, the mass spectrum in Figures 7 and 8, and the elementary analysis in Table 1.

8. (Currently amended) An alkaloid reaction product according to claim 1 ~~any one of claims 1 to 7~~, obtainable in a process ~~defined in any one of claims 11 to 22~~ comprising: a) providing a reaction mixture comprising an organic solvent and at least one alkaloid having a tertiary nitrogen in its chemical structure and an alkylating agent, and carrying out an alkylation reaction by reacting the at least one alkaloid with the alkylating agent in the presence of the organic solvent, to allow for the formation of at least one reaction product wherein alkylation occurs at the tertiary alkaloid nitrogen thus converting the tertiary nitrogen into a quaternary nitrogen; b) after termination of the reaction subjecting the resulting reaction mixture to at least one washing step with an aqueous solvent or water, to remove water-soluble compounds present in the reaction mixture; and c) subjecting the washed reaction mixture to a treatment with a strong acid in gaseous or liquid form, for converting at least one remaining reaction product into a water soluble form.

9. (Original) A chelidonian derivative, wherein the naturally occurring chelidonian is present in a quaternated form according to the subsequent formula (I), wherein as a fourth ligand R¹ to the quaternary nitrogen a hydrogen or a methyl or ethyl residue is present.



10. (Currently amended) The chelidonin derivative of claim 9 in water soluble form, ~~preferably as a salt with a strong acid, most preferably in the form of a hydrochloride.~~

11. (Currently Amended) A process for the manufacture of an alkaloid reaction product defined in claim 1 comprising: a) providing a reaction mixture comprising an organic solvent and at least one alkaloid having a tertiary nitrogen in its chemical structure and an alkylating agent, and carrying out an alkylation reaction by reacting the at least one alkaloid with the alkylating agent in the presence of the organic solvent, to allow for the formation of at least one reaction product wherein alkylation occurs at the tertiary alkaloid nitrogen thus converting the tertiary nitrogen into a quaternary nitrogen; b) after termination of the reaction subjecting the resulting reaction mixture to at least one washing step with an aqueous solvent or water, to remove water-soluble compounds present in the reaction mixture; and c) subjecting the washed reaction mixture to a treatment with a strong acid in gaseous or liquid form, ~~preferably with gaseous hydrogen chloride or a hydrogen chloride solution,~~ for converting at least one remaining reaction product into a water soluble form, ~~particularly a water-soluble salt.~~

12. (Currently Amended) The process of claim 11 wherein in step c) a reaction product precipitates during or after the treatment with acid, whereafter the precipitate is separated from the organic solvent, and optionally further purified ~~preferably using organic solvents.~~

13. (Currently Amended) The process of claim 11 ~~claims 11 or 12~~, wherein the alkylation reaction is carried out at elevated temperature, ~~in particular at the boiling point of the solvent.~~

14. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 13~~, wherein at least one alkaloid present in the herb *Chelidonium majus* L., ~~preferably a mixture of several or all alkaloid of *Chelidonium majus* L.,~~ is used as an alkaloid source.

15. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 14~~, wherein the alkaloid is selected from the group consisting of chelidonine, protopin, stylopin, allocryptopin, homochelidonine, sanguinarine, chelamidine, chelamine, L-sparteine and oxychelidonine.

16. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 15~~, wherein chelidonine, oxychelidonine, or methoxychelidonine is applied as a sole alkaloid source.

17. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 16~~, wherein the alkylating agent is a physiologically active agent; ~~preferably a cytotoxic agent~~.

18. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 17~~, wherein the alkylating agent is water soluble or decomposes into water-soluble components upon contact with water.

19. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 18~~, wherein the organic solvent facilitates or contributes to the alkylation reaction ~~and preferably is selected from the group consisting of monochloromethane, dichloromethane, trichloromethane, monochloroethane, dichloroethane and trichloroethane~~.

20. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 19~~, wherein the alkylating agent is tris (1-aziridinyl) phosphine sulphide (CAS 52-24-4).

21. (Currently Amended) The process according to claim 11 ~~any one of claims 11 to 20~~, wherein the reaction product comprises at least one compound selected from the group consisting of chelidonine, oxychelidonine and methoxychelidonine, wherein said compound has a quaternary nitrogen atom to which, as a fourth ligand, a hydrogen residue or a residue originating from the alkylating agent is bound; ~~the residue preferably being selected from the group consisting of a methyl, ethyl and tris (1-aziridinyl) phosphine sulphide residue~~.

22. (Currently amended) The process according to ~~any one of claim 21~~, wherein tris (1- aziridinyl) phosphine sulphide is used as the alkylating agent and wherein said residue is a part of said alkylating agent; ~~optionally a decomposition product formed due to the treatment with acid~~.

23. (Currently Amended) A method for preparing Use of the reaction product defined in any one of claims 1 to 10 as a drug or medicament which comprises incorporating therein the reaction product of claim 1.

24. (Currently Amended) A method ~~Use of the reaction product defined in any one of claims 1 to 10~~ for the manufacture of a pharmaceutical composition for the prophylaxis or treatment of a disease or bodily condition selected from the group consisting of viral infection, cancer, immunological dysfunction, metabolic dysfunction and radiation damage wherein the method comprises the addition of the reaction product of claim 1 to said product.

25. (Currently Amended) The method ~~Use~~ according to claim 24, wherein the disease is selected from the group consisting of allergies, osteoporosis, skin ~~tumours~~ tumors, influenza virus infections, rheumatic diseases, scars, postoperative wounds, epilepsy and multiple sclerosis.

26. (New) The alkaloid reaction product according to claim 2, wherein at least one alkaloid derivative is present in the form of a hydrochloride.

27. (New) The alkaloid reaction product according to claim 3, wherein the alkaloid is a mixture of alkaloids present in the herb *Chelidonium majus* L.

28. (New) The chelidonin derivative of claim 10 in the form of a salt of a strong acid.

29. (New) The chelidonin derivative of claim 10 in the form of a hydrochloride salt.

30. (New) The process according to claim 11, wherein the washed reaction mixture is treated with a gaseous hydrogen chloride or a hydrogen chloride solution.

31. (New) The process according to claim 11, wherein at least one remaining reaction product is converted to a water soluble salt.

32. (New) The process of claim 12, wherein the precipitate after separation from the organic solvent is further purified using organic solvents.

33. (New) The process of claim 13, wherein the alkylation reaction is carried out at the boiling point of the solvent.

34. (New) The process according to claim 14, wherein a mixture of alkaloids present in the herb *Chelidonium majus* L is used as the alkaloid source.

35. (New) The process according to claim 17, wherein the alkylating agent is a cytotoxic agent.

36. (New) The process according to claim 19, wherein the organic solvent is selected from the group consisting of monochloromethane, dichloromethane, trichloromethane, monochloroethane, dichloroethane and trichloroethane.
37. (New) The process according to claim 21, wherein the residue is selected from the group consisting of a methyl, ethyl and tris (1-aziridiny) phosphine sulphide residue.
38. (New) The process according to claim 22, wherein said residue is a decomposition product formed due to the treatment with acid.